

**Notice of Allowability**

Application No.

09/903,330

Applicant(s)

MITRA, PRADIP

Examiner

Art Unit

M. R. Sedighian

2633

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 10/26/04.
2.  The allowed claim(s) is/are 1-50.
3.  The drawings filed on 11 July 2001 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some\*    c)  None    of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
    1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.  
(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
    Paper No./Mail Date \_\_\_\_\_.  
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
    Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
    of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
    Paper No./Mail Date \_\_\_\_\_
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

  
M. R. SEDIGHIAN  
PRIMARY EXAMINER

1. This communication is responsive to applicant's 10/26/2004 after final amendments in the application of Pradip Mitra filed 7/11/2001. Claims 1-50 are now pending.

2. The following is an examiner's statement of reasons for allowance:

As to claims 1, 21, and 36, the prior arts of Goossen et al. (US Patent No: 5,949,561), Spears (US Patent No: 5,455,421), and Coldren et al. (Patent Application Publication No: 2002/0009258) do not fairly teach or suggest a high bandwidth wavelength receiver for use in a WDM system, wherein the receiver comprises of a plurality of photodetectors to receive a plurality of wavelength channels, and wherein each individual one of the photodetectors comprises a plurality of first elongate elements for absorbing a respective one of the plurality of wavelength channels and thereby creating electrical carriers, the plurality of first elongate elements forming a first diffraction grating for the respective one of the plurality of wavelength channels, and a plurality of second elongate elements for absorbing the respective one of the plurality of wavelength channels and thereby creating electrical carriers, the plurality of second elongate elements forming a second diffraction grating for the respective one of the plurality of wavelength channels, a period of the second diffraction grating being equal to a period of the first diffraction grating, the plurality of second elongate elements being substantially perpendicular to and intersecting the plurality of first elongate elements so as to form a two-dimensional diffraction grating, in addition with other limitations recited in each of the claims 1, 21, and 36.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Goossen et al. (US Patent No: 5,949,561) is cited to a plurality of photodetectors (col. 5, lines 15-20 and 2, fig. 4) to receive a plurality of wavelength channels (col. 5, lines 40-45), wherein each individual one of the wavelength channels being absorbed by one of the respective photodetectors (col. 5, lines 42, 45), and each individual one of the photodetectors outputting a portion of a respective wavelength channel based on an absorbed respective one of the wavelength channels (col. 5, lines 16-21).

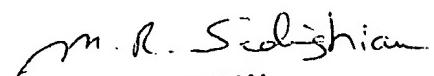
Spears (US Patent No: 5,455,421) is cited to show a photodetector for detecting optical radiation at a predetermined wavelength (col. 2, lines 47-50), wherein the photodetector is comprised of a diffractive resonant optical cavity (col. 2, lines 48-64).

Coldren et al. (Patent Application Publication No: 2002/0009258) is cited to show optical detectors that comprise of resonant cavity photodetectors having a double-absorber design (page 8, claims 1-3).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



M. R. SEDIGHIAN  
PRIMARY EXAMINER